LONG ISLAND BOTANICAL SOCIETY NEWSLETTER

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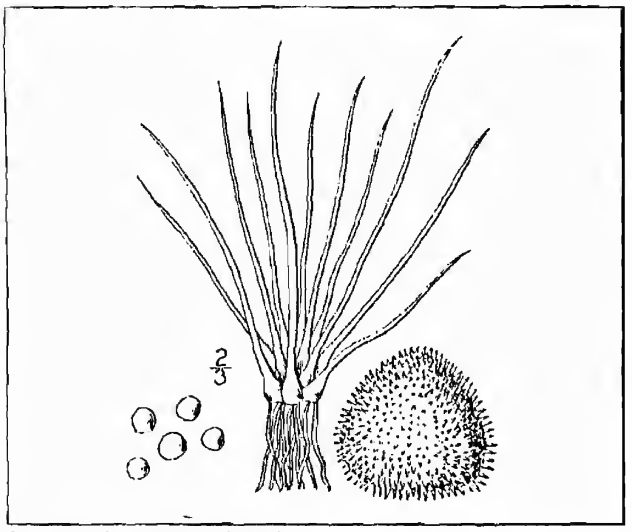
Quillwort Quests

Part II. Isoëtes echinospora Dur. var. *braunii* (Dur.) Engelm.

In the Herbarium of the Brooklyn Botanic Garden I found an unidentified specimen of *Isoetes* collected by *E.* L. Morris from the Carmans River *(Morris* 11741). George Kalmbacher kindly lent me the sheet to study, and I determined Morris's specimen to be I. *echinospora* Dur. On July 25, 1970 I located specimens of this species in the Carmens River (Upper reaches of Lower Lake, Carmens River, *Bookout* 103). Specimens were sent to the Gray Herbarium, Brooklyn Botanic Garden, National Herbarium at the Smithsonian. New York Botanical Garden, New York State Botanist, Cornell University, and to the American Fern Society.



Isoetes echinospora var. *braunii*

On August 7, 1970 I collected *I. echinospora* at West Brook Pond near the conjunction of Sunrise Highway (27) and Montauk Highway (27A), North Great River, Suffolk County (*Bookout* 104). All but a few of nineteen individuals were given to Vernon Marttala (March 17, 1973) who was then a student at the New York Botanical Garden. Later, Mr. Marttala wrote to me (October 29, 1974) that he was leaving this material with Tom Delendick who might give some to Joseph Beitel, then in Michigan. Some of this material was returned to me by P. K. Holmgren. West Brook Pond was the only station where I observed quillworts emersed in mud during a dry period.

On August 21 and 22, 1970 I found *I. echinospora* at the north end of Canaan Lake (just south of Ohls Street), Patchogue (*Bookout* 147 *& 148).* C. V. Morton identified this material as *Isoetes echinospora* var. *braunii* (Dur.) Engelrn. Besides the U. S. National Herbarium, I sent specimens to Dr. John T. Mickel at the New York Botanical Garden and to Dr. Clausen at Cornell.

On September 1, 1973 I found *I. echinospora* off the northwest shore of Laurel Lake, Suffolk County, near Mattituck (*Bookout* 225) in water about three feet deep. Isolated plants grew just offshore in water only one foot deep. W. C. Muenscher noted that *Isoetes tuckermani* [sic] was dredged from Laurel Lake in 1935 (Muenscher, 1939, p. 101). Exploration of Laurel Lake as well as Lake Ronkonkoma with diving equipment is needed.

I believe that it was in Muenscher that I read that *I. engelmannii* had been found at Kellis Pond in Bridgehampton. I went there several times but never found a single leaf of quillwort floating in debris nor found a plant anywhere else.

There is a sheet of *I. braunii* Dur. in the Brooklyn Botanic Garden Herbarium (submerged in shallow water of pond at Babylon, Oct. 4, 1935, *Svenson* 6787). I looked for floating leaves of quillwort at Belmont Lake, Babylon, unsuccessfully.--**Henry Bookout**

Bibliography

Muenscher, W. C. 1939. Aquatic vegetation of Long Island waters. V, in "Biological survey of the Freshwaters of Long Island." Suppl. 28th Ann. Rep't N. Y. State Cons: Dep't, p. 88-101.

PROGRAMS

No Programs are scheduled for July or August.

SUNSET

I know he's dead
But 'twas not he who, draped in silk and net,
They lowered deep into the narrow grave
And dropped the flowers on.

He was a man
Whose very voice was strong with fire and steel.
No silk for him, no pale and waxy flowers
But oak and granite, ice and questing winds
The restless ocean's roll, the tempest's strength
More god than man to me.

But now he's gone.
They told their grief to all the listening world
They gathered around and praised his many deeds
Recalled his words, his power and his skill.
But I wept in the lonely silences
For he was life to me.

In solemn state
They chanted elegies above his form
To glorify his life, as when the sun
Sinks at day's end into his far-off grave
While on his path flare brilliant reds and gold
And beauty never known by day flows through the sky
To mourn Apollo's death.

As sunset comes,
So did they weep, and mark with gilded brush
His every footstep on the paths of life.
Until his casket sank into the earth.
Then sunset colors faded from the clouds
To leave them gray and damp with leaden weight.
The deepening shadows come, and all alone
I face the endless night.

Mabel Allred Cronquist

[Editor: the above poem was written by the wife of the late Arthur Cronquist and is printed here with her permission]

IN MEMORIAM

Arthur Cronquist (1919-1992)

There was never a dull moment when travelling wih Art Cronquist. If we weren't talking botany, he would be telling jokes or singing; he could handle both difficult pieces and plain doggerels with ease. At a restaurant he would carefully study the menu and then order a hamburger, plain, and water, "lots of water, bring a pitcher." He loved to meet people and converse.

He had written profusely, and his writings profoundly affected the course of botanical thought. He wrote and spoke with authority, as evident in his evolution and classification book: "The book presents taxonomy as seen by Cronquist...I make no pretense of equal time for opposing views. For other points of view. read other authors" (Cronquist, 1988).

Arthur Cronquist was born on 19 March 1919, in San Jose, California. He was raised by his mother whose maiden name he kept for his own. As a teenager he collected plants in Utah and Idaho, and discovered several State records which led to his first scientific publication in 1939: "New plant records in Utah and Idaho" (Cronquist, 1939).

In 1938 (at the age of 19) he earned his B.S. degree from Utah Stale University. He began his undergraduate studies at Idaho State University majoring in range-management, but his first botany course (taught by Ray J. Davis) changed all that. One of the course requirements was the preparation of a plant collection. Prof. Davis chose the two top students to study the two largest families: the Poaceae (grass family) and the Asteraceae (composite family). To determine who would be assigned each family the two students flipped a coin and Art got the comps. He would eventually become a world authority on the family, and among his many publications was the Compositae treatment in Ray J. Davis' *Flora of Idaho* (Cronquist, 1952).

In 1940 Art married Mabel Allred, and during that same year he received his M.S. degree from Utah State University. He then went on to the University of Minnesota to begin work on his Ph.D. His major professor was Carl Rosendahl, a former student of the German botanist Adolf Engler. Rosendahl and Cronquist would latter co-author "The goldenrods of Minnesota" and "The asters of Minnesola."

In 1943, while still working on his doctorate, An accepted a position at the New York Botanical Garden. For one year he worked half-time on the tropical family Simaroubaceae and half-time on his dissertation, "Revision of the Norh American species of *Erigeron,* north of Mexico" (Cronquist, 1947). After defending his doctoral dissertation in 1944, Art continued working another two years at NYBG. However, he did not want to pursue a career in neotropical botany (which is what NYBG had in mind); so in 1946 he accepted h e position of Assistant Professor of botany at h e University of Georgia.

Arthur Cronquist excelled at teaching. He wrote two college textbooks on botany; both went through two editions and one was translated into two foreign languages. His botany courses were always

field-oriented and some of his "field trips" covered over 5,000 miles in three weeks time. His door was always open to students (and anyone else), and he never hesitated to assist students in the field. As my major professor, he and I traveled together to **Utah,** Canada, New England, and the southern Appalachian Mountains. I probably learned more botany in his pick-up truck than in any graduate level course.

After teaching two years at Georgia, he accepted the position of Assistant Professor at Washington State University. In 1951 he spent a year in Brussels, with his wife and two children, working on the flora of the Belgian Congo for the Belgian Government.

After an absence of almost five years, Art returned to the New York Botanical Garden where he remained for the next 40 years. One of his first **tasks** was the treatment on Compositae for The New Britton and Brown Illustrated Flora. Other major taxonomic treatments (authored or co-authored) include:

1952. Compositae. In: Flora of Idaho.
1955-1969. Vascular Plants of the Pacific **Northwest.** Five volumes.
1960. Senecioneae. In: Illustrated flora of the Pacific states.
1963. Manual of vascular plants of **northeastern** United States and adjacent Canada. Edition 1.
1971. Compositae. In: Flora of the Galapagos Islands.
1972-present. Intermountain flora. Vascular plants of the Intermountain West. Six volumes.
1973. Flora of the Pacific Northwest.
1980. Vascular flora of the southeastern United States. Volume 1. Asteraceae.
1991. Manual of vascular plants. Edition 2.

The general system of classification of flowering plants was in a moribund condition when Art published his early taxonomic works. The popular but archaic system of Engler and Prantl no longer reflected current evolutionary thought. In the 1950's Art started to publish some of his thoughts on a new system of angiosperm classification. These thoughts culminated in his magnum opus, An integrated system of classification of flowering plants; currently the most widely used system of classification in North America. Some of his other publications on the general system of classification include:

1955. Phylogeny and taxonomy of the **Compositae.**
1957. Outline of a new system of families and orders of dicotyledons.
1960. The divisions of classes of plants.
1963. The taxonomic significance of evolutionary parallelism.
1964. The old systematics.
1965. The **status** of the general system of classification of flowering plants.
1967. A consideration of the evolutionary and taxonomic significance of some biochemical, micromorphological, and physiological **characters** in the **thallophytes.**
1968. The evolution and classification of flowering plants. Edition 1.
1969. On the relationship between taxonomy and evolution.
1973. Chemical Plant **Taxonomy:** A generalist's view of a promising specialty.
1976. The taxonomic significance of the **structure** of plant proteins: a classical taxonomist's view.
1977. On the **taxonomic** significance of secondary **metabolites** in angiosperms.
1981. An integrated **system** of classification of flowering plants.
1987. A botanical critique of **cladism.**
1988. The evolution and classification of flowering plants. Edition 2.

It was a great privilege to have had Art Cronquist as a friend and teacher. He will be sorely missed by all who knew him.--Eric Lamont

THE JOE BEITEL MEMORIAL PLAQUE

Skip Blanchard has coinposed the following statement to be inscribed on a bronze plaque at Big Reed Pond, Montauk. If anyone would like to propose an alternative phrase, or rewording of **Skip's,** this is your last chance (please contact Skip at 421-5619).

Joseph M. **Beitel**

1952-1991

Talented botanist, **gifted** teacher, repected frlend

We remember him here in one of his favorite places

The Long **Island Botanical Society**

New Members

The Long Island Botanical Society is pleased to welcome the following new members:

Jess Hanks - Pearl River, NJ; Gary Lawton - NYS Parks, Oakdale; Mario Cardillo - Syosset; Dennis Puleston - Brookhaven; Pera Gorson - Baldwin; Ted Gordon - Southanipton, NJ; Dr. Robert Smith - Oneonta, NY; Arthur Mundree - NYC; Gary Kennen - Stony Brook; Norman Zika - Tonawanda, NY; Henry Bookout - Riverhead; Paul Huth - Mohonk Preserve, New Paltz; James Grimes Landscape Design - Montauk; TNC Mashomack Preserve - Shelter Is.; Dr. Jon Greenlaw - Dix Hills; Joyce Hyon - NYC; Suzanne Kilgallen - Northport; Knowlton C. Foote - LaFayette, NY; Susan Benson - Hampton Bays; David Junkins - Centerport; Drs. Julie A. & Paul S. Mankiewicz - Gaia Inst., NYC; Bridget DeCandido - Aquebog; Ronald Rozsa - Willington, CT

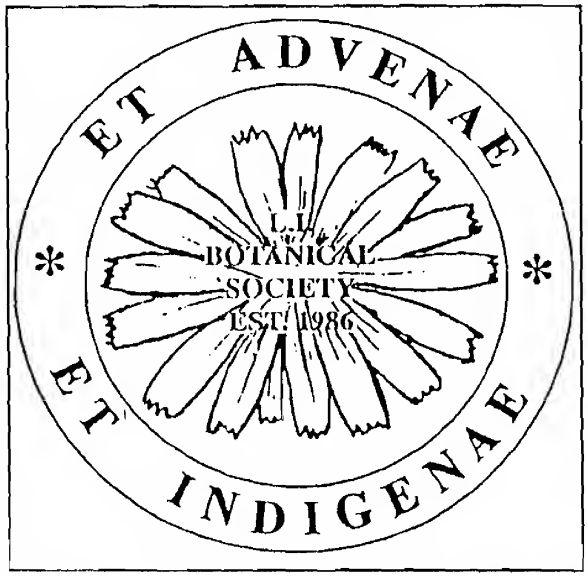
LONG ISLAND BOTANICAL SOCIETY
Founded: 1986; Incorporated: 1989.

The Long Island Botanical Society is dedicated to the promotion of field botany and a greater understanding of the plants that grow wild on Long Island, New York.

President	Eric Lamont
Vice President	Chris Mangels
Treasurer	Carol Johnston
Recrd Sec'y	Barbara Conolly
Cor'sp Sec'y	Jane Blanchard
Local Flora	Skip Blnnchard
Field Trip	Al Lindberg
Membership	Lois Lindberg
Conservation	Louise Harrison
	John Turner
Hospitality	Nancy Smith
	Joanne Tow
Program	Eric Lamont
Editor	Steven Clemants

Membership

Membership is open to all, and we welcome any new members. Annual dues are $10. For membership, make your check payable to LONG ISLAND BOTAMCAL SOCIETY and mail to: Lois Lindberg, Membership chairperson, Welwyn Preserve, Crescent Beach Road, Glencove. NY 11542.



LIBS LOGO? #3

Henry Bookout has sent the following logo sugestion. He writes "...when I think of L.I. flowers chicory comes first to mind..." and "I feel L.I. flora is too disturbed to use an endemic as an emblem, but the motto would point to the interest in discovery and conservation."

He also writes "...a Bot. Soc. *ought* to have a Latin motto!". Accordingly he sought the advice of Dr. Jeff Greenberger who suggested "et advenae et indigenae" which loosely translates to "both recent arrivals and native species".

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